10/709,015 Page 4 of 9

In the Claims:

Please amend the claims as follows:

Claim 1 (currently amended): A blood-pressure monitoring device, comprising: a thin-film, pressure-monitoring module comprising a pressure-sensitive region; an optical module comprising an optical source that generates both red and infrared radiation and an optical transmission detector; and a microprocessor configured to receive and process information from the thin-film, pressure-monitoring module and the optical module to determine blood pressure.

Claim 2 (original): The blood-pressure monitoring device of claim 1, wherein the pressure-sensitive region comprises a material characterized by pressure-dependent electrical properties.

Claim 3 (original): The blood-pressure monitoring device of claim 1, wherein the pressure-monitoring module comprises a plastic film that encases the pressure-sensitive region.

Claim 4 (currently amended): The blood-pressure monitoring device of claim 1, wherein the optical source is comprises a laser or a light-emitting diode.

Claim 5 (currently amended): The blood-pressure monitoring device of claim 1, wherein the optical detector is comprises a photodiode.

Claim 6 (original): The blood-pressure monitoring device of claim 1, further comprising a finger-mounted component that comprises the optical module.

Claim 7 (original): The blood-pressure monitoring device of claim 6, wherein the finger-mounted component is an annular ring.

Claim 8 (original): The blood-pressure monitoring device of claim 1, further

10/709,015 Page 5 of 9

comprising a wrist-mounted component that comprises the thin-film pressure-monitoring module.

Claim 9 (original): The blood-pressure monitoring device of claim 1, further comprising a short-range wireless transmitter.

Claim 10 (currently amended): The blood-pressure monitoring device of claim 9, wherein the short-range wireless transmitter is a radio-frequency transmitter operating a Bluetooth™ peer-to-peer, part-15, or 802.11 wireless protocol.

Claim 11 (original): The blood-pressure monitoring device of claim 1, further comprising an external, secondary wireless component.

Claim 12 (original): The blood-pressure monitoring device of claim 11, wherein the external, secondary wireless component comprises a short-range wireless receiver.

Claim 13 (currently amended): The blood-pressure monitoring device of claim 12, wherein the short-range wireless receiver is a radio-frequency receiver operating a BluetoothTM peer-to-peer, part-15, or 802.11 wireless protocol.

Claim 14 (original): The blood-pressure monitoring device of claim 11, wherein the external, secondary wireless component further comprises a long-range wireless transmitter.

Claim 15 (original): The blood-pressure monitoring device of claim 14, wherein the long-range wireless transmitter is configured to transmit information over a terrestrial, satellite, or 802.11-based wireless network.

Claim 16 (currently amended): The blood-pressure monitoring device of claim 15, wherein the long-range wireless transmitter is configured to transmit data over a

10/709,015 Page 6 of 9

wireless network operating on at least one of the following protocols: CDMA, GSM, GPRS, Mobitex, DataTac, iDEN, and analogs and derivatives thereof.

Claim 17 (original): The blood-pressure monitoring device of claim 1, wherein the pressure-monitoring module is configured to generate a pressure waveform.

Claim 18 (original): The blood-pressure monitoring device of claim 17, wherein the optical module is configured to generate an optical waveform.

Claim 19 (original): The blood-pressure monitoring device of claim 18, wherein the microprocessor comprises computer-readable code that processes both the optical and pressure waveforms to determine blood pressure.

Claim 20 (new): A blood pressure monitoring device, comprising: an optical sensor for measuring the transmission of light at two different wavelengths through a person's finger;

a thin-film pressure sensor for measuring pressure above an underlying artery in a person's wrist;

a microprocessor configured to receive and process information from the thin-film pressure sensor and the optical sensor for determining blood pressure; and, a short-range wireless transmitter for transmitting blood pressure information to a wireless hub.